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Serial No. 10/085,346

REMARKSI. Introduction

In response to the Office Action dated January 12, 2007, claims 1, 10, 19, and 28 have been amended. Claims 1-36 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. Prior Art Rejections

In paragraphs (5)-(7) of the Office Action, claims 1 was rejected under 35 U.S.C. §103(a) as being unpatentable over Cohen et al., U.S. Patent No. 5,282,249 (Cohen) in view of Kocher et al., U.S. Patent No. 6,289,455 (Kocher) and further in view of Wong et al., U.S. Patent No. 6,278,633 (Wong).

In paragraphs (8)-(10) of the Office Action, claims 10 and 28 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kocher in view of Barth (6,334,216) (Barth) and further in view of Wong.

In paragraphs (11)-(12) of the Office Action, claim 19 was rejected under 35 U.S.C. §103(a) as being anticipated by Kocher in view of Wong.

In paragraph (5) of the Office Action, the Examiner merely stated that the dependent claims stand rejected under the same rationale as given in the prior Office Action. In this regard, claims 3, 6, and 7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cohen in view of Kocher, in view of Wong, and further in view of Pitts, U.S. Publication No. 20020145931 (Pitts). Claim 9 was rejected under 35 U.S.C. §103(a) as being unpatentable over Cohen in view of Kocher, in view of Wong, and further in view of Barth, U.S. Patent No. 6,334,216 (Barth). Claims 11, 13, 14, 17, 18, 27, 29, 31, 32, and 35-36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kocher in view of Barth and further in view of Wong. Claims 12, 15, 16, 30, 33, and 34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kocher in view of Barth in view of Wong and further in view of Pitts. Claims 20, 22, 23, and 26 were rejected under 35 U.S.C. §103(a) as being anticipated by Kocher in view of Wong. Claims 21, 24, and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kocher in view of Wong and further in view of Pitts.

Applicants respectfully traverse these rejections.

Independent claims 1, 10, 19 and 28 are generally directed to the use of an identification number. Specifically, the claims address an identification number that is used to limit a cloning attack. As set forth throughout the specification (including paragraphs [0062], [0072]-[0074], and

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[0078]), the identification number uniquely identifies the device (i.e., the CAM) and such an identifier is used in a particular context. In this regard, the claims specifically provide that the identification number is used to limit a cloning attack wherein such a cloning attack comprises copying the identification number to a new pirated CAM. As indicated in the specification, hacking techniques typically use a low cost cloning attack wherein the identity of a pirate card is copied to a new card. The claims provide for hiding this identification number in the isolated nonvolatile memory component. By preventing access to the identification number (except through the custom logic block), the low cost cloning attack techniques are limited.

In addition, Applicants note that the claims provide further limitations. Namely, the claims provide for two nonvolatile memory components. One nonvolatile memory component is protected and contains the hidden number as described above. The other nonvolatile memory component is unprotected and is referred to as a microprocessor's unprotected nonvolatile memory component. The claims provide specific limitations and details regarding both the protected and unprotected nonvolatile memory components. In this regard, the amended claims provide that the microprocessor's unprotected nonvolatile memory component and the protected nonvolatile memory component use physical and logical address ranges that are the same. As set forth in paragraph [0069] of the application as filed, the can be shared since they are controlled and programmed by separate entities. The use of the same physical and logical address range helps obscure use of the memory containing the hidden number by potential attackers making it more difficult to determine the memory map and usage of code segments within the CAM.

Neither of the cited references teach nor suggest these various elements of Applicants' independent claims. The Office Action relies on Kocher to teach the protected nonvolatile memory component. However, nowhere in Kocher is there any discussion where logical and physical address ranges of a protected component and an unprotected component are the same. In fact an electronic search of Kocher for the term "logical" provided no results. Accordingly, without even mentioning a logical address range, Kocher cannot possibly teach that the same logical address range is used by two different and distinct nonvolatile memories. Further, advantages of such an embodiment are neither taught, described, or remotely alluded to in Kocher.

In addition to the above, Applicants note that the other cited references fail to cure the deficiencies of Kocher.

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Moreover, the various elements of Applicants' claimed invention together provide operational advantages over Cohen, Kocher, Wong, Pitts, and Barth. In addition, Applicants' invention solves problems not recognized by Cohen, Kocher, Wong, Pitts, and Barth.

Thus, Applicants submit that independent claims 1, 10, 19, and 28 are allowable over Cohen, Kocher, Wong, Pitts, and Barth. Further, dependent claims 2-9, 11-18, 20-27, and 29-36 are submitted to be allowable over 1, 10, 19, and 28, respectively, and thus contain all the limitations of the independent claims. In addition, dependent claims 2-9, 11-18, 20-27, and 29-36 recite additional novel elements not shown by Cohen, Kocher, Wong, Pitts, and Barth.

### III. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicants' undersigned attorney.

Respectfully submitted,

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